

Link 2. Echinacea angustifolia Biology

(Compiled by Robyn Klein)

1907-1955 - *Brauneria pallida* (*Echinacea angustifolia*) root is listed in the United States Dispensatory.

1916-1947 - *Brauneria pallida* root is listed in the National Formulary of the United States as a synonym or an equivalent substitute for *E. angustifolia*.

Echinacea is in the daisy or sunflower family now known as *Asteraceae*.

The old Latin names for *Echinacea* were *Rudbeckia purpurea* and *Brauneria pallida*.

Echinacea angustifolia plants are slow-growing and long-lived. Mature plants average 18 to 44 years old.

50% of *Echinacea angustifolia* plants re-sprout within two years after harvest, contributing to the resilience of wild populations. However, it might take 20-40 more years for these *Echinacea* plants to become large enough to be profitable. The holes left by the harvesters seem to act as a moisture reservoir for the damaged root to re-sprout.

Most other tap-rooted perennial plants cannot re-sprout after a significant portion of their root is dug due to the damage to the root system.

The loss of flowers and seeds from disturbance and harvesting can lead to loss of pollinators and other species that depend on *Echinacea* for nectar and food.

The biggest threats to *Echinacea angustifolia* are overgrazing, herbicides, overharvesting and loss of habitat.

Land sprayed with herbicides for thistle appears to also kill wild *Echinacea*.

For more detailed botanical information visit:

- USDA Natural Resources Conservation Service Plants Database: *Echinacea angustifolia*

<http://plants.usda.gov/core/profile?symbol=ecan2>

- Forest Service: *Echinacea angustifolia*

<http://www.fs.fed.us/database/feis/plants/forb/echang/all.html>

- Internet Archive, Biodiversity Heritage Library: *Echinacea angustifolia*

http://archive.org/details/cbarchive_48828_nomenclaturalhistoryandtaxonom1992